

# ABSTRACT

A TFT array structure comprises a Thin-Film Transistor, a data line, a scanning line, a pixel electrode and an auxiliary electrode. The data line is connected to the drain of the Thin-Film Transistor, and the scanning line is connected to the gate of the Thin-Film Transistor. The scanning line is oriented substantially orthogonally with respect to the data line to form a plurality of rectangular pixels in matrix. A predetermined electrode (source electrode or auxiliary electrode) is formed at the place where the pixel electrode is close to the edge of the data line, and that predetermined electrode is coupled to the pixel electrode and located at a mask on which the data line is located. It is also characterized that the capacitance-coupling effect generated between the pixel electrode and the data line is the same as that generated between the predetermined electrode and the data line. The performances of all pixels are uniform despite errors occurred during the aligning process on the pixel electrode.